IN THE CLAIMS:

1.   (Currently amended) A computer implemented method for recording message activity in a log, the method comprising the steps of:

receiving a request from an application to put a message, comprising message data, to a queue; and

detecting whether there is a previous occurrence of the message data in the log, and if there is not a previous occurrence writing a log record including the message data, but if there is a previous occurrence writing a log record including a reference for locating the previous occurrence of the message data in the log, wherein the reference for locating the previous occurrence of the message in the log enables the position of the log record containing the message data to be obtained.

2.   (Original) A method as claimed in claim 1 wherein the request to put a message includes an indication that the message data was put to a message queue or got from a message queue in a previous request from the application.

3.   (Original) A method as claimed in claim 2 wherein the indication is a value which indicates that the message data was involved in the immediately preceding request from the application.

4.   (Original) A method as claimed in claim 2 wherein the indication is a token which uniquely identifies the message data within the scope of the application.

5.   (Original) A method as claimed in claim 1 further comprising the steps:

receiving a request from the application to get a message, comprising message data, from a queue; and

storing a reference, separate from the log and associated with the application, for locating a previous occurrence of the message data in the log.

6.   (Original) A method as claimed in claim 1 wherein if the detecting step detects that there is not a previous occurrence of the message data in the log it further stores a reference, separate

from the log and associated with the message, for subsequently locating the message data in the log.

7.   (Currently amended) A <u>computer implemented</u> method for detecting the re-use of message data comprising the steps:

 receiving a request from an application to put a message, comprising message data, to a queue; and

 detecting, based on an indicator included with the request, that the message data was previously put to a message queue or got from a message queue by the application.

8.   (Original) A method as claimed in claim 7 wherein the indicator is a value which indicates that the message data was involved in the immediately preceding request from the application.

9.   (Original) A method as claimed in claim 7 wherein the indicator is a token which uniquely identifies the message data within the scope of the application.

10.   (Currently amended) A computer program product, recorded on a medium, comprising instructions which, when executed on a data processing host, causes said host to carry out a method comprising the steps:

 receiving a request from an application to put a message, comprising message data, to a queue; and

 detecting whether there is a previous occurrence of the message data in [[the]] <u>a</u> log, and if there is not a previous occurrence, writing a log record including the message data, but if there is a previous occurrence writing a log record including a reference for locating the previous occurrence of the message data in the log, <u>wherein the reference for locating the previous occurrence of the message in the log enables the position of the log record containing the message data to be obtained</u>.

11.   (Original) A computer program product as claimed in claim 10 wherein the request to put a message includes an indication that the message data was put to a message queue or got from a message queue in a previous request from the application.

12.   (Original) A computer program product as claimed in claim 11 wherein the indication is
a value which indicates that the message data was involved in the immediately preceding request
from the application.

13.   (Original) A computer program product as claimed in claim 11 wherein the indication is
a token which uniquely identifies the message data within the scope of the application.

14.   (Original) A computer program product as claimed in claim 10 further comprising the
steps:
        receiving a request from the application to get a message, comprising message data, from
a queue; and
        storing a reference, separate from the log and associated with the application, for locating
a previous occurrence of the message data in the log.

15.   (Original) A computer program product as claimed in claim 10 wherein if the detecting
step detects that there is not a previous occurrence of the message data in the log it further stores
a reference, separate from the log and associated with the message, for subsequently locating the
message data in the log.

16.   (Original) A computer program product, recorded on a medium, comprising instructions
which, when executed on a data processing host, causes said host to carry out a method
comprising the steps:
        receiving a request from an application to put a message, comprising message data, to a
queue; and
        detecting, based on an indicator included with the request, that the message data was
previously put to a message queue or got from a message queue by the application.

17.   (Original) A computer program product as claimed in claim 16 wherein the indicator is a
value which indicates that the message data was involved in the immediately preceding request
from the application.

18.   (Original) A computer program product as claimed in claim 16 wherein the indicator is a token which uniquely identifies the message data within the scope of the application.

19.   (Currently amended) A data processing apparatus comprising:
        a non-volatile memory storage device for storing log records thereon in a log comprising one or more log files;
        a volatile memory storage device;
        means for receiving a request from an application to put a message, comprising message data, to a queue;
        means for detecting whether there is a previous occurrence of the message data in the log;
        means responsive to failing to detect a previous occurrence of the data in the log for writing a log record including the message data; and
        means responsive to detecting a previous occurrence of the data in the log for writing a log record including a reference for locating the previous occurrence of the message data in the log, wherein the reference for locating the previous occurrence of the message in the log enables the position of the log record containing the message data to be obtained.

20.   (Original) An apparatus as claimed in claim 19 wherein the request to put a message includes an indication that the message data was put to a message queue or got from a message queue in a previous request from the application.

21.   (Original) An apparatus as claimed in claim 20 wherein the indication is a value which indicates that the message data was involved in the immediately preceding request from the application.

22.   (Original) An apparatus as claimed in claim 21 wherein the indication is a token which uniquely identifies the message data within the scope of the application.

23.   (Original) An apparatus as claimed in claim 19 further comprising:
        means for receiving a request from the application to get a message from the queue; and

means tar storing a reference, separate from the log and associated with the application, for locating a previous occurrence of the message data in the log.

24.   (Original) An apparatus as claimed in claim 19 further comprising:

means responsive to failing to detect a previous occurrence of the message data in the log for storing a reference, separate from the log and associated with the message, for subsequently locating the message data in the log.

25.   (Original) A data processing apparatus comprising:

means for receiving a request from an application to put a message, comprising message data, to a queue; and

means for deducing, based on an indicator included with the request, that the message data was previously put to a message queue or got from a message queue by the application.

26.   (Original) A data processing apparatus as claimed in claim wherein the indicator is a value which indicates that the message data was involved in the immediately preceding request from the application.

27.   (Original) A data processing apparatus as claimed in of claim wherein the indicator is a token which uniquely identifies the message data within the scope of the application.